

Grade 5

Unit 4

**Decimal Computation
And
Applications**

Student Workbook

HOMEWORK

Name:

Name _____

Date _____

1. Express as decimal numerals. The first one is done for you.

| | |
|---|-------|
| a. Five thousandths | 0.005 |
| b. Thirty-five thousandths | |
| c. Nine and two hundred thirty-five thousandths | |
| d. Eight hundred and five thousandths | |
| e. $\frac{8}{1000}$ | |
| f. $\frac{28}{1000}$ | |
| g. $7\frac{528}{1000}$ | |
| h. $300\frac{502}{1000}$ | |

2. Express in words.

- a. 0.008
- b. 15.062
- c. 607.409

3. Write the number on a place value chart then write it in expanded form using fractions or decimals to express the decimal place value units. The first one is done for you.

- a. 27.346

| tens | ones | | tenths | hundredths | thousandths |
|------|------|---|--------|------------|-------------|
| 2 | 7 | • | 3 | 4 | 6 |

$$27.346 = 2 \times 10 + 7 \times 1 + 3 \times \left(\frac{1}{10}\right) + 4 \times \left(\frac{1}{100}\right) + 6 \times \left(\frac{1}{1000}\right)$$

OR

$$27.346 = 2 \times 10 + 7 \times 1 + 3 \times 0.1 + 4 \times 0.01 + 6 \times 0.001$$

b. 0.362

c. 49.564

4. Write a decimal for each of the following. Use a place value chart to help if necessary.

a. $3 \times 10 + 5 \times 1 + 2 \times \left(\frac{1}{10}\right) + 7 \times \left(\frac{1}{100}\right) + 6 \times \left(\frac{1}{1000}\right)$

b. $9 \times 100 + 2 \times 10 + 3 \times 0.1 + 7 \times 0.001$

c. $5 \times 1000 + 4 \times 100 + 8 \times 1 + 6 \times \left(\frac{1}{100}\right) + 5 \times \left(\frac{1}{1000}\right)$

5. At the beginning of a lesson, a piece of chalk is 2.967 of an inch. At the end of lesson, it's 2.308 of an inch. Write the two amounts in expanded form using fractions.

a. At the beginning of the lesson:

b. At the end of the lesson:

6. Mrs. Herman asked the class to write an expanded form for 412.638. Nancy wrote the expanded form using fractions and Charles wrote the expanded form using decimals. Write their responses.

Name _____

Date _____

1. Use
- $>$
- ,
- $<$
- , or
- $=$
- to compare the following.

| | | |
|---|----------------------|---|
| a. 16.45 | <input type="text"/> | 16.454 |
| b. 0.83 | <input type="text"/> | $\frac{83}{100}$ |
| c. $\frac{205}{1000}$ | <input type="text"/> | 0.205 |
| d. 95.045 | <input type="text"/> | 95.545 |
| e. 419.10 | <input type="text"/> | 419.099 |
| f. Five ones and eight tenths | <input type="text"/> | Fifty-eight tenths |
| g. Thirty-six and nine thousandths | <input type="text"/> | Four tens |
| h. One hundred four and twelve hundredths | <input type="text"/> | One hundred four and two thousandths |
| i. One hundred fifty-eight thousandths | <input type="text"/> | 0.58 |
| j. 703.005 | <input type="text"/> | Seven hundred three and five hundredths |

2. Arrange the numbers in increasing order.

a. 8.08 8.081 8.09 8.008

b. 14.204 14.200 14.240 14.210

3. Arrange the numbers in decreasing order.

a. 8.508 8.58 7.5 7.058

b. 439.216 439.126 439.612 439.261

4. James measured his hand. It was 0.17 meters. Jennifer measured her hand. It was 0.165 meters. Whose hand is bigger? How do you know?
5. In a paper airplane contest, Marcel's plane travels 3.345 meters. Salvador's plane travels 3.35 meters. Jennifer's plane travels 3.3 meters. Based on the measurements, whose plane traveled the farthest distance? Whose plane traveled the shortest distance? Explain your reasoning using a place value chart.

Name _____

Date _____

Round to the given place value. Label the number lines to show your work. Circle the rounded number. Use a separate sheet to show your decompositions for each one.

1. 4.3

a. hundredths



b. tenths



c. ones



d. tens



2. 225.286

a. hundredths



b. tenths



c. ones



d. tens



3. 8.984

a. hundredths



b. tenths



c. ones



d. tens



4. On a major League Baseball diamond, the distance from the pitcher's mound to home plate is 18.386 meters.
- Round this number to the nearest hundredth of a meter to estimate the distance. Use a number line to show your work.
 - About how many centimeters is it from the pitcher's mound to home plate?
5. Jules reads that one pint is equivalent to 0.473 liters. He asks his teacher how many liters there are in a pint. His teacher responds that there are about 0.47 liters in a pint. He asks his parents, and they say there are about 0.5 liters in a pint. Jules says they are both correct. How can that be true? Explain your answer.

Name _____

Date _____

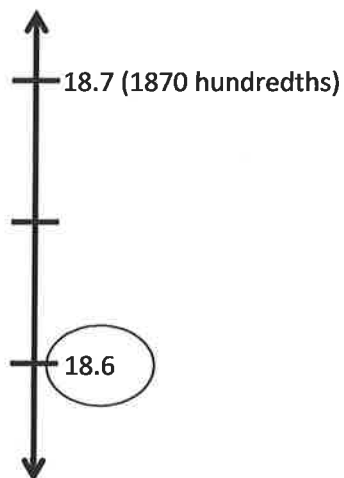
1. Round the quantity to the given place value. Draw number lines to explain your thinking. Circle the rounded value on the number line.

a. 43.586 to nearest tenth, hundredth, and whole number

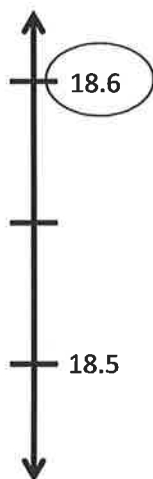
b. 243.875 to nearest tenth, hundredth, ten, and hundred

2. A trip from New York City to Seattle is 2,852.1 miles. A family wants to make the drive in 10 days, driving the same number of miles each day. About how many miles will they drive each day? Round your answer to the nearest tenth of a mile.

3. A decimal number has two digits to the right of its decimal point. If we round it to the nearest tenth, the result is 18.6.
- a. What is the maximum possible value of this decimal? Use words and the number line to explain your reasoning.



- b. What is the minimum possible value of this decimal? Use words, numbers and pictures to explain your reasoning.



Name _____

Date _____

1. Solve.

- a. 3 tenths + 4 tenths = _____ tenths
- b. 12 tenths + 9 tenths = _____ tenths = _____ one(s) _____ tenth(s)
- c. 3 hundredths + 4 hundredths = _____ hundredths
- d. 27 hundredths + 7 hundredths = _____ hundredths = _____ tenths _____ hundredths
- e. 4 thousandths + 3 thousandths = _____ thousandths
- f. 39 thousandths + 5 thousandths = _____ thousandths = _____ hundredths _____ thousandths
- g. 5 tenths + 7 thousandths = _____ thousandths
- h. 4 ones 4 tenths + 4 tenths = _____ tenths
- i. 8 thousandths + 6 ones 8 thousandths = _____ thousandths

2. Solve using the standard algorithm.

| | |
|------------------------|---------------------------|
| a. $0.4 + 0.7 =$ _____ | b. $2.04 + 0.07 =$ _____ |
| c. $6.4 + 3.7 =$ _____ | d. $56.04 + 3.07 =$ _____ |

e. $72.564 + 5.137 =$ _____

f. $75.604 + 22.296 =$ _____

3. Walkway Over the Hudson, a bridge that crosses the Hudson River in Poughkeepsie, is 2.063 kilometers. Anping Bridge, which was built in China 850 years ago, is 2.07 kilometers long.

a. Which bridge is longer? How much longer? Show your thinking.

b. Leah likes to walk her dog on the Walkway Over the Hudson. If she walks across and back, how far do she and her dog walk?

4. For his parents' anniversary, Danny spends \$5.87 on a photo. He also buys 3 balloons for \$2.49 each and a box of strawberries for \$4.50. How much money does he spend all together?

Name _____

Date _____

1. Subtract. You may use a place value chart.

a. 9 tenths – 3 tenths = _____ tenth

b. 9 ones 2 thousandths – 3 ones = _____ ones _____ thousandths

c. 4 hundreds 6 hundredths – 3 hundredths = _____ hundreds _____ hundredths

d. 56 thousandths – 23 thousandths = _____ thousandths
= _____ hundredths _____ thousandths

2. Solve using the standard algorithm.

| | | |
|---------------------------|----------------------------|-----------------------------|
| a. $1.8 - 0.9 =$ _____ | b. $41.84 - 0.9 =$ _____ | c. $341.84 - 21.92 =$ _____ |
| d. $5.182 - 0.09 =$ _____ | e. $50.416 - 4.25 =$ _____ | f. $741. - 3.91 =$ _____ |

3. Solve.

| | | |
|------------------------------|-------------------------|-------------------------------|
| a. 30 tens – 3 tens 3 tenths | b. 5 – 16 tenths | c. 24 tenths – 1 one 3 tenths |
| d. 6 ones 7 hundredths – 2.3 | e. 8.246 – 5 hundredths | f. 5 ones 3 tenths – 0.53 |

4. Mr. House wrote 8 tenths minus 5 hundredths on the board. Maggie said the answer is 3 hundredths because 8 minus 5 is 3. Is she correct? Explain.

5. A clipboard costs \$2.23. It costs \$0.58 more than a notebook. Lisa buys two clipboards and one notebook, and paid with a ten dollar bill. Use a tape diagram with calculations to show her change.

Name _____

Date _____

1. Solve by drawing disks on a place value chart. Write an equation and express the product in standard form.

a. 2 copies of 4 tenths

b. 4 groups of 5 hundredths

b. 4 times 7 tenths

d. 3 times 5 hundredths

c. 9 times as much as 7 tenths

f. 6 thousandths times 8

2. Draw a model similar to the one pictured below. Find the sum of the partial products to evaluate each expression.

a. 4×6.79

| | | | | | |
|---|------------|---|--------------|---|------------------|
| | 6 ones | + | 7 tenths | + | 9 hundredths |
| 4 | 4 x 6 ones | | 4 x 7 tenths | | 4 x 9 hundredths |

_____ + _____ + _____ = _____

b. 6×7.49 hundredths

c. 9 copies of 3.65

d. 3 times 20.175

3. Leanne multiplied 8×4.3 and got 32.24. Is Leanne correct? Use an area model to explain your answer.

4. Anna buys groceries for her family. Hamburger meat is \$3.38 per pound, sweet potatoes are \$0.79 each, and hamburger rolls are \$2.30 a bag. If Anna buys 3 pounds of meat, 5 sweet potatoes, and one bag of hamburger rolls, what will she pay in all for the groceries?

Name _____

Date _____

1. Choose the reasonable product for each expression. Explain your thinking in the spaces below using words, pictures, and numbers.

a. 2.1×3 0.63 6.3 63 630

b. 4.27×6 2562 256.2 25.62 2.562

c. 7×6.053 4237.1 423.71 42.371 4.2371

d. 9×4.82 4.338 43.38 433.8 4338

2. YiTing weighs 8.3 kg. Her older brother is 4 times as heavy as her. How much does her older brother's weight in kg?

3. Tim is painting his storage shed. He buys 4 gallons of white paint and 3 gallons of blue paint. If each gallon of white paint costs \$15.72 and each gallon of blue paint is \$21.87, how much will Tim spend in all on paint?
4. Ribbon is sold at 3 yards for \$6.33. Jackie bought 24 yards of ribbon for a project. How much did she pay?

Name _____

Date _____

1. Complete the sentences with the correct number of units and complete the equation.

a. 3 groups of _____ tenths is 1.5 $1.5 \div 3 =$ _____

b. 6 groups of _____ hundredths is 0.24 $0.24 \div 6 =$ _____

c. 5 groups of _____ thousandths is 0.045 $0.045 \div 5 =$ _____

2. Complete the number sentence. Express the quotient in units and then in standard form.

a. $9.36 \div 3 =$ _____ ones $\div 3 +$ _____ hundredths $\div 3$
 $=$ _____ ones $+$ _____ hundredths
 $=$ _____

b. $36.012 \div 3 =$ _____ ones $\div 3 +$ _____ thousandths $\div 3$
 $=$ _____ ones $+$ _____ thousandths
 $=$ _____

c. $3.55 \div 5 =$ _____ tenths $\div 5 +$ _____ hundredths $\div 5$
 $=$ _____
 $=$ _____

d. $3.545 \div 5 =$ _____
= _____
= _____

3. Find the quotients. Then use words, numbers, or pictures to describe any relationships you notice between each pair of problems and quotients.

a. $21 \div 7 =$ _____ $2.1 \div 7 =$ _____

b. $48 \div 8 =$ _____ $0.048 \div 8 =$ _____

4. Are the quotients below reasonable? Explain your answer.

a. $0.54 \div 6 = 9$

b. $5.4 \div 6 = 0.9$

c. $54 \div 6 = 0.09$

5. A toy airplane costs \$4.84. It costs 4 times as much as a toy car. What is the cost of the toy car?
6. Julian bought 3.9 liters of cranberry juice and Jay bought 8.74 liters of apple juice. They mixed the two juices together then poured them equally into 2 bottles. How many liters of juice are in each bottle?

Name _____

Date _____

1. Draw number disks on the place value chart to solve. Show your steps using long division.

a. $5.241 \div 3 =$ _____

| Ones | Tenths | Hundredths | Thousandths |
|------|--------|------------|-------------|
| | | | |
| | | | |
| | | | |
| | | | |

$$3 \overline{) 5.241}$$

b. $3.445 \div 5 =$ _____

| Ones | Tenths | Hundredths | Thousandths |
|------|--------|------------|-------------|
| | | | |
| | | | |
| | | | |
| | | | |

$$5 \overline{) 3.445}$$

2. Solve using the standard algorithm.

a. $0.64 \div 4 = \underline{\hspace{2cm}}$

b. $6.45 \div 5 = \underline{\hspace{2cm}}$

c. $16.404 \div 6 = \underline{\hspace{2cm}}$

3. Mrs. Mayuko paid \$40.68 for 3 kg of shrimp. What's the cost of 1 kg of shrimp?
4. The total weight of 6 pieces of butter and a bag of sugar is 3.8 lb. If the weight of the bag of sugar is 1.4 lb., what's the weight of each piece of butter?

Name _____

Date _____

1. Draw number disks on the place value chart to solve, and show your steps using long division.

a. $0.7 \div 4 =$ _____

| Ones | ● | Tenths | Hundredths | Thousandths |
|------|---|--------|------------|-------------|
| | | | | |

$$4 \overline{) 0.7}$$

b. $8.1 \div 5 =$ _____

| Ones | ● | Tenths | Hundredths | Thousandths |
|------|---|--------|------------|-------------|
| | | | | |

$$5 \overline{) 8.1}$$

2. Solve using the standard algorithm.

| | | |
|--------------------|-------------------|------------------|
| a. $0.7 \div 2 =$ | b. $3.9 \div 6 =$ | c. $9 \div 4 =$ |
| d. $0.92 \div 2 =$ | e. $9.4 \div 4 =$ | f. $91 \div 8 =$ |

3. A rope 8.7 m long is cut into 5 equal pieces. How long is each piece?

4. Yasmine bought 6 gallons of apple juice. After filling up 4 bottles of the same size with apple juice, she had 0.3 gallon of apple juice left. What's the amount of apple juice in each bottle?

Name _____

Date _____

Solve using tape diagrams.

1. A gardener installed 42.6 meters of fencing in a week. He installed 13.45 meters on Monday and 9.5 meters on Tuesday. He installed the rest of the fence in equal lengths on Wednesday through Friday. How many meters of fencing did he install on each of the last three days?

2. Jenny charges \$9.15 an hour to babysit toddlers and \$7.45 an hour to babysit school-aged children.
 - a. If Jenny babysat toddlers for 9 hours and school-aged children for 6 hours, how much money did she earn in all?

 - b. Jenny wants to earn \$1300 by the end of the summer. How much more will she need to earn to meet her goal?

3. A table and 8 chairs weigh 235.68 pounds together. If the table weighs 157.84 lbs., what is the weight of one chair in pounds?
4. Mrs. Cleaver mixes 1.24 liters of red paint with 3 times as much blue paint to make purple paint. She pours the paint equally into 5 containers. How much blue paint is in each cup? Give you answer in liters.

Name _____

Date _____

1. Estimate the product. Solve using an area model and the standard algorithm. Remember to express your products in standard form.

a. $53 \times 1.2 \approx \underline{\hspace{1cm}} \times \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$

12 (tenths)

$$\begin{array}{r} \times 53 \\ \hline \end{array}$$

b. $2.1 \times 82 \approx \underline{\hspace{1cm}} \times \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$

21 (tenths)

$$\begin{array}{r} \times 82 \\ \hline \end{array}$$

2. Estimate, and then use the standard algorithm to solve. Express your products in standard form.

a. $4.2 \times 34 \approx \underline{\hspace{1cm}} \times \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$

42 (tenths)

$$\begin{array}{r} \times 34 \\ \hline \end{array}$$

b. $65 \times 5.8 \approx \underline{\hspace{1cm}} \times \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$

58 (tenths)

$$\begin{array}{r} \times 65 \\ \hline \end{array}$$

c. 3.3×16

d. 15.6×17

e. 73×2.4

f. 193.5×57

3. Mr. Jansen is building an ice rink in his backyard that will measure 8.4 meters by 22 meters. What is the area of the rink?

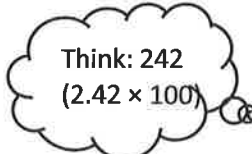
4. Rachel runs 3.2 miles each week day and 1.5 miles each day of the weekend. How many miles will she have run in 6 weeks?

Name _____


Date _____

1. Estimate the product. Solve using the standard algorithm. Use the thought bubbles to show your thinking. (Draw an area model on a separate sheet if it helps you.)

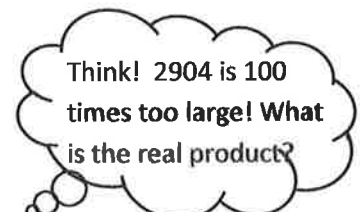
a. $2.42 \times 12 \approx \underline{\quad} \times \underline{\quad} = \underline{\quad}$


$$\begin{array}{r} 2.42 \\ \times 12 \\ \hline \end{array}$$

b. $4.13 \times 37 \approx \underline{\quad} \times \underline{\quad} = \underline{\quad}$


$$\begin{array}{r} 4.13 \\ \times 37 \\ \hline \end{array}$$

$2.42 \times 12 = \underline{\quad}$



$4.13 \times 37 = \underline{\quad}$

2. Solve using the standard algorithm.

a. 2.03×13

c. 371.23×53

b. 53.16×34

d. 1.57×432

3. Use the whole number product and place value reasoning to place the decimal point in the second product. Explain how you know.
- a. If $36 \times 134 = 4,824$ then $36 \times 1.34 =$ _____
- b. If $84 \times 2,674 = 224,616$ then $84 \times 26.74 =$ _____
- c. $19 \times 3,211 = 61,009$ then $321.1 \times 19 =$ _____
4. A slice of pizza costs \$1.57. How much does 27 slices cost?
5. A spool of ribbon holds 6.75 meters. If the craft club buys 21 spools:
- a. What is the total cost if the ribbon sells for \$2 per meter?
- b. If the club uses 76.54 meters to complete a project, how much ribbon will be left?

Name _____

Date _____

1. Estimate, and then solve using the standard algorithm. You may draw an area model if it helps you.

a. $24 \times 2.31 \approx \underline{\hspace{1cm}} \times \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$

$$\begin{array}{r} 2.31 \\ \times 24 \\ \hline \end{array}$$

b. $5.42 \times 305 \approx \underline{\hspace{1cm}} \times \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$

$$\begin{array}{r} 5.42 \\ \times 305 \\ \hline \end{array}$$

2. Estimate, and then solve using the standard algorithm. Use a separate sheet to draw the area model if it helps you.

a. 1.23×21

b. 3.2×41

c. 0.32×41

d. 0.54×62

e. 6.09×28

f. 6.83×683

g. 6.09×208

h. 171.76×555

3. Eric walks 2.75 miles to and from work every day for an entire year. How many miles did he walk?
4. Art galleries often price paintings by the square inch. If a painting measures 22.5 inches by 34 inches and costs \$4.15 per square inch, what is the selling price for the painting?
5. Gerry spends \$1.25 each day on lunch at school. On Fridays she buys an extra snack for \$0.55. How much money will she spend in two weeks?

Name _____

Date _____

1. Complete the chart below with the measurement equivalents.

| Liters | Milliliters |
|--------|-------------|
| 1 | |
| 2 | |
| 3 | |
| 4 | |
| 10 | |
| 15 | |
| 30 | |
| 100 | |

| Quarts | Gallons |
|--------|---------|
| | 1 |
| | 2 |
| | 3 |
| | 4 |
| | 10 |
| | 15 |
| | 30 |
| | 100 |

2. Convert.

a. 18 yd = _____ ft

d. 72 kl = _____ L

g. 5 km 14 m = _____ m

b. _____ oz = 23 lb

e. 2 mi = _____ yd = _____ ft

h. 31 gal = _____ qt = _____ pt

c. _____ cm = 64 m

f. _____ g = 35 kg

i. _____ fl oz = 56 c

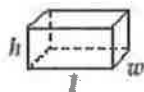
3. Jesse needs 13 gallons of paint to finish painting the exterior of his barn. If he uses 10 quarts of the paint for the doors, how many quarts will be left for the siding on the barn?

4. Ms. Lane's laptop stays on for 6 hours without being plugged in, and Mr. Trevor's laptop stays powered for 400 minutes. Whose laptop lasts longer?

5. The food pantry distributes 10-oz bags of rice. If three 5-lb bags are donated to the pantry, how many 10-ounce bags can be made?

Grade 5 Mathematics Reference Sheet

FORMULAS



Right Rectangular Prism

Volume = lwh

Volume = Bh

CONVERSIONS

1 centimeter = 10 millimeters

1 meter = 100 centimeters = 1,000 millimeters

1 kilometer = 1,000 meters

1 gram = 1,000 milligrams

1 kilogram = 1,000 grams

1 pound = 16 ounces

1 ton = 2,000 pounds

1 cup = 8 fluid ounces

1 pint = 2 cups

1 quart = 2 pints

1 gallon = 4 quarts

1 liter = 1,000 milliliters

1 kiloliter = 1,000 liters

1 mile = 5,280 feet

1 mile = 1,760 yards

COMMON CORE STATE STANDARDS for Mathematics

Name _____

Date _____

1. Convert. Use your Reference Sheet if necessary.

a. $2.7 \text{ kL} = \underline{\hspace{2cm}} \text{ L}$

d. $9.13 \text{ kg} = \underline{\hspace{2cm}} \text{ g}$

g. $1.3 \text{ tons} = \underline{\hspace{2cm}} \text{ lb}$

b. $\underline{\hspace{2cm}} \text{ fl oz} = 4.25 \text{ c}$

e. $4.75 \text{ gal} = \underline{\hspace{2cm}} \text{ qt}$

h. $0.75 \text{ mi} = \underline{\hspace{2cm}} \text{ yd}$

c. $\underline{\hspace{2cm}} \text{ m} = 1.45 \text{ km}$

f. $\underline{\hspace{2cm}} \text{ pt} = 12.5 \text{ qt}$

i. $\underline{\hspace{2cm}} \text{ oz} = 8.5 \text{ lb}$

2. Jennifer wants to convert 7.85 meters to centimeters, but she does not have paper, pencil, or a calculator. Describe a method she can use.

3. A standard hot tub holds 2.3 kiloliters of water. After filling up two of nine hot tubs, Johnson's water service truck empties. How many liters of water are still needed to fill the remaining tubs?

Name _____

Date _____

Solve.

1. Jocelyn borrowed 3.75 kg of flour from her grandmother to bake 3 batches of cookies and 2 cakes. Each cookie recipe called for 225 grams of flour. Each cake recipe needed 1.2 kg of flour. After baking, how much flour was Jocelyn able to return to her grandmother?
2. The new athletic facility on the downtown campus measures 0.74 km by 0.4 km. How many square meters is the facility?
3. It is recommended that athletes drink a minimum of 0.24 L of water for every 20 minutes of athletic activity. John plays tennis for 3 hours. His water bottle holds 1,500 mL. Will he have enough water to meet the minimum requirement? If so, how much water will he have left? If not, what is the least amount of water he will need to put in his bottle when it is empty? Express your answer in liters.

4. A Rottweiler gave birth to 3 puppies. The first puppy weighed 5.1 kg. The second weighed 206 g less than the first. The third puppy weighed 0.2 kg more than the second.
- What is the total weight of the litter in grams?
 - How much more did the heaviest puppy weight than the lightest one?
 - The mother weighed 4 times the total weight of her litter. What was her weight in kilograms?
5. A courier charges \$6.25 to ship a 2 lb-package. For each ounce over 2 lb, they charge an additional \$0.35 per ounce.
- How much would it cost to ship a package weighing 4 lb 6 oz?
 - Which would be less expensive? Sending two packages weighing 2 lb 4 oz each, or combining them into one package weighing 4 lb 8 oz? What is the difference in price?

Name _____ Date _____

1. Divide. Show the division in the right column in two steps. The first two have been done for you.

a. $1.8 \div 6 = 0.3$

g. $0.8 \div 4 =$ _____

b. $1.8 \div 60 = (1.8 \div 6) \div 10 = 0.3 \div 10 = 0.03$

h. $80 \div 400 =$ _____

c. $2.4 \div 8 =$ _____

i. $0.56 \div 7 =$ _____

d. $2.4 \div 80 =$ _____

j. $0.56 \div 70 =$ _____

e. $14.6 \div 2 =$ _____

k. $9.45 \div 9 =$ _____

f. $14.6 \div 20 =$ _____

l. $9.45 \div 900 =$ _____

2. Use place value reasoning and the first quotient to compute the second quotient. Use place value to explain how you placed the decimal point.

a. $65.6 \div 80 = 0.82$

$65.6 \div 8 = \underline{\hspace{2cm}}$

b. $2.5 \div 50 = 0.65$

$2.5 \div 5 = \underline{\hspace{2cm}}$

c. $19.2 \div 40 = 0.48$

$19.2 \div 4 = \underline{\hspace{2cm}}$

d. $39.6 \div 6 = 6.6$

$39.6 \div 60 = \underline{\hspace{2cm}}$

3. Chris rode his bike along the same route every day for 60 days. He logged that he had gone exactly 127.8 miles.

a. How many miles did he bike each day? Show your work to explain how you know.

b. How many miles did he bike over the course of two weeks?

4. 2.1 liters of coffee were equally distributed to 30 cups. How many milliliters of coffee were in each cup?

Name _____

Date _____

1. Estimate the quotients.

a. $3.53 \div 51 \approx$

b. $24.2 \div 42 \approx$

c. $9.13 \div 23 \approx$

d. $79.2 \div 39 \approx$

e. $7.19 \div 58 \approx$

2. Estimate the quotient in (a). Use your estimated quotient to estimate (b) and (c).

a. $9.13 \div 42 \approx$

b. $913 \div 42 \approx$

c. $91.3 \div 42 \approx$

3. Mrs. Huynh bought a bag of 3 dozen toy animals as party favors for her son's birthday party for \$28.97. Estimate the price of each toy animal.
4. Carter drank 15.75 gallons of water in 4 weeks. He drank the same amount of water each day.
- Estimate how many gallons he drank in one day.
 - Estimate how many gallons he drank in one week.
 - About how many days altogether will it take him to drink 20 gallons?

Name _____

Date _____

1. Create two whole number division problems that have a quotient of 9 and a remainder of 5. Justify which is greater using decimal division.

2. Divide, then check your work with multiplication.

a. $75.9 \div 22$

c. $77.14 \div 38$

b. $97.28 \div 19$

d. $12.18 \div 29$

3. Divide.

a. $5,224 \div 43$

b. $1,908 \div 36$

4. Use the quotients in Problem 3 to write the quotients for the following. Explain how you decided where to place the decimal in the quotient.

a. $522.4 \div 43 =$ _____

$52.24 \div 43 =$ _____

b. $190.8 \div 36 =$ _____

$19.08 \div 36 =$ _____

5. The height of Burj Dubai, the tallest building in the world (2013), has a total of 162 stories. If the building is 828 meters tall, about how many meters tall is each story?

6. Elaine has a desktop that is 4.5 feet by 5.5 feet, and she is going to cover it with patches of wallpaper that each measure 18 inches wide and 24 inches long.

How many patches will Elaine need to cover the entire desktop? Justify your answer.

Name _____

Date _____

1. Divide and check.

a. $7 \div 28$

c. $6.5 \div 13$

e. $561.68 \div 28$

b. $51 \div 25$

d. $132.16 \div 16$

f. $604.8 \div 36$

2. In a science class, students water a plant with the same amount of water each day for 28 consecutive days. If the students use a total of 23.8 liters of water over the 28 days, how many liters of water did they use each day? How many milliliters did they use each day?

3. A seamstress has a piece of cloth that is 3 yards long. She cuts it into shorter lengths of 16 inches each. How many of the shorter pieces can she cut?
4. Jenny filled 12 pitchers with an equal amount of lemonade in each. The total amount of lemonade in the 12 pitchers was 41.4 liters. How much lemonade would be in 7 pitchers?